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December 15, 2011

Bill Wycko
Environmental Review Officer
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

Subject: The 34th America's Cup and James R. Herman Cruise Terminal and Northeast Wharf Plaza Final Environmental Impact Report

Dear Mr. Bill Wycko:

Bay Area Air Quality Management District (District) staff has reviewed your agency's Final Environmental Impact Report (FEIR) prepared for the 34th America's Cup (AC34), and the James R. Herman Cruise Terminal and Northeast Wharf Plaza (Cruise Terminal) projects. According to the FEIR, the shore-side electrical power installation that was supported by funding from the District and put into place by the Port of San Francisco (Port) at Pier 27 in 2010 will be decommissioned due to construction of the Cruise Terminal and AC34-related activities, and is assumed to be unavailable in 2012, 2013 and possibly 2014 (pg. 12.13-13 & 12.13-18).

District staff has the following specific comments on the changes to the DEIR from the new environmental impact analysis provided in the FEIR.

Updated and Augmented Air Quality Mitigation Measures

The District is pleased to see the mitigation measures that have been either updated or augmented in the FEIR, which will help reduce the significant and unavoidable impacts from construction- and operational-related air pollutant emissions associated with AC34 and the Cruise Terminal.

The most effective mitigation measure identified to substantially lessen the significant and unavoidable impacts from AC34 and the Cruise Terminal is **M-AQ-4e,** electrification at Pier 70. However, as discussed in more detail below, the implementation of this measure cannot be assured due to the wording of the mitigation measure. If **M-AQ-4e** is amended in the FEIR to require implementation (and the language regarding feasibility is removed), then it can be assumed that this measure will take place and substantively reduce the overall impact associated with the de-commission of the shore-side power at Pier 27, as well as emissions from operational-related activities associated with AC34. In addition, the recommended implementation of an off-site mitigation program, as discussed below, would not be needed with the assured implementation of **M-AQ-4e**.

Updated Air Quality Assumptions and Analyses

The FEIR includes changes to portions of the air quality analysis presented in the DEIR, including a revision to the project description assumptions regarding the number of spectator and support vessels anticipated at the AC34 events in 2012 and 2013. The

methodology used in the DEIR, and the FEIR, to determine the number of vessels and spectators is critical to the validity of the subsequent air quality analysis and impact determination.

The updated estimates of criteria pollutants and toxic air contaminants for the anticipated spectator and support vessels in the FEIR are lower than what is presented in the DEIR due to changes in the methodology used to determine the number of spectator and support vessels. For example, the FEIR revised the estimated number of spectator/recreational boats during an average peak weekend day from 2,200 to 800 during the AC34 2013 event, and from 1,833 to 332 during the AC34 2012 event.

Accordingly, the estimated operational-related criteria air pollutant emissions associated with spectator and support vessels were revised in the FEIR and are substantially lower than what is presented in the DEIR.

To develop an attendance projection and estimate visitation patterns, the DEIR utilized the "penetration rate analysis" methodology. The goal of the penetration rate analysis is to not only understand the number of spectators but also to estimate their likely location (for example water vs. land). To develop spectator projections and visitation patterns, the methodology relied on a number of key assumptions and considerations (including the uniqueness of every America's Cup event; the increased visibility of the races and events provided by the geography of San Francisco; etc.) and utilized data from past America's Cup events. According to the DEIR (pg. PD1-6), the penetration rates for AC34 were developed based on the experience of three fairly recent America's Cup events (in Valencia, Spain and New Zealand), the key differentiating qualitative factors between previous America's Cups and AC34, and an examination of attendance at events in San Francisco (including Fleet Week, various parades/celebrations, San Francisco Giants games, etc.). Finally, the DEIR used the penetration rate analysis to estimate the locations from which spectators would likely view the race: on land or water.

The FEIR includes a three-page addendum to the AC34 visitation analysis in the DEIR which provides refined on-the-water visitation estimates yielded from a boat count during the Fleet Week 2011 event. While the FEIR states that the analysis in the addendum builds on the methodology used in the DEIR which is (in part) based on the number of boats for an average peak day during Fleet Week, the number of boats counted during Fleet Week 2011 was found to be much lower than originally estimated and the projections in the FEIR were adjusted. However, the addendum does not provide the methodology for how the Fleet Week 2011 boat count was conducted, nor does the addendum clearly state whether the methodology used for the boat count is the same as the methodology used for the boat counts for previous Fleet Week events, nor is the actual number of boats counted during Fleet Week 2011 included in the addendum. The FEIR also does not include the methodology or assumptions relied upon to refine the number and type of support boats anticipated at the AC34 events.

It appears that the FEIR utilized a different methodology than the DEIR for estimating the number of boats for AC34. For example, as stated on pg. PD1A-3, the DEIR estimated the number of spectators for an average AC34 peak day (amongst other factors) based on Fleet Week boat estimates from previous years. When revising those estimates it appears that the FEIR omits certain elements of the analysis, such as boat count estimates from previous years for Fleet Week, and instead used the data from only one Fleet Week (2011) day rather than from a number of years (as was used in the DEIR). In addition, the DEIR states (at length) the various assumptions, factors and methodology used to conduct attendance projection and visitation patterns for AC34, which includes data from three

recent America's Cup events, and attendance at various events in San Francisco which includes parades, baseball games, Fleet Week and others. The FEIR did not explain how those assumptions and methodology were utilized in the revised spectator and support vessel count estimates, nor did the FEIR clearly demonstrate how the number of boat counts from one Fleet Week day could so drastically alter the estimates presented in the DEIR. The FEIR did not explain why the revised vessel estimates should be considered more accurate than those provided in the DEIR. If a different methodology altogether was utilized to estimate spectator vessels for AC34 in the refined FEIR, it was not stated nor justified in the addendum in the FEIR.

Finally, the revised and much lowered boat estimates in the FEIR appear to be in contrast with the findings of the visitation analysis in the DEIR. The DEIR states on pg. PD1-9 that the overall attendance projection is higher for AC34 than previous America's Cup events, and provides a number of factors considered in the analysis that contributed to the increased attendance estimate. However, while the FEIR found a significant decrease in spectator and support vessel estimates than what was presented in the DEIR, the FEIR did not update or provide further analysis on the number of and/or location of land-based visitors, nor was the total projected attendance for AC34 amended according to the substantial decrease in expected spectator and support vessels.

It does not appear that the revised methodology and assumptions used in the FEIR to estimate the number of spectator and support vessels is consistent with the assumptions and methodology used in the DEIR. The FEIR does not provide full disclosure justifying the changes and providing for an independent analysis of which methodology was the most appropriate. It appears that the revised decrease in boat estimates in the FEIR may underestimate the operational-related criteria air pollutant emissions associated with AC34.

Off-site Mitigation of Criteria Air Pollutant Emissions

According to the FEIR, mitigating criteria air pollutant emissions through an in-lieu payment to an off-site mitigation program does not have an essential nexus and rough proportionality to the Project's significant impact. The District respectfully disagrees.

The DEIR and FEIR identified significant and unmitigable impacts from operational-related criteria air pollutant emissions associated with AC34 activities. Accordingly, all feasible mitigation measures should be implemented to reduce this impact to the maximum extent feasible. In addition to the mitigation measures outlined in the FEIR, the District believes that an offsite mitigation program is feasible and can demonstrate a direct nexus and rough proportionality to the impacts identified in the FEIR.

According to the visitation analysis in the DEIR, a vast majority of the spectators at the AC34 event will be local and from the Bay Area. According to the revised analysis in the FEIR, local private spectator vessels account for approximately 28-35% of the total estimated ROG and NOx emissions from operational-related activities associated with AC34 in 2012 and 2013. The offsite mitigation program recommended by the District would be used to fund projects that replace older, high emitting, gasoline powered harbor craft (commercial and recreational) engines operating in the Bay Area with newer, cleaner, more efficient engines, thereby removing ROG and NOx air pollutant emissions from the San Francisco Bay Area Air Basin (SFBAAB) from the exact sources of emissions that resulted in the significant and unmitigable impacts identified in the DEIR and FEIR. The amount of emissions targeted for the offsite mitigation program would be the amount of emissions estimated to be over the District's significance thresholds. Therefore, an offsite mitigation

program would provide for emission reductions from the same sources of emissions contributing to the significant impact thus providing the nexus and in direct proportion to the amount of emissions above the thresholds.

Assuming a cost-effectiveness of $8,000 per weighted ton of criteria air pollutants, the cost to offset the emissions from small and private vessels, according to the refined operational emissions analysis for AC34 in the FEIR, is approximately $1.2 million. This calculation utilizes emissions from the highest year (2013) as the basis for the reductions.

A similar offsite mitigation program has been implemented recently by the District through the Conoco Phillips DEIR settlement agreement with the Attorney General's office. The District received $4.4 million to offset significant air quality impacts identified in the Conoco Phillips DEIR, in which projects were funded by the District within the Bay Area that achieved substantial GHG emission reductions that otherwise would not have occurred. The District is positioned to operate an offsite mitigation program for the AC34 event.

Shore-side Power Decommission

The FEIR also included updated Cruise Terminal Port Call Assumptions which are based upon confirmed bookings for 2012 by shore-side power-capable ships. The number of shore-side power-capable ships in the updated emissions analysis has increased from 17 (in the DEIR) to 40 cruise ships in the FEIR for the years 2012, 2013 and 2014. According to the FEIR, this would represent an increase in hoteling emissions when compared to the emissions estimated in the DEIR (pg. 12.13-4). This increase in emissions identified in the FEIR associated with the loss of shore-side power at Pier 27 represents a more than 100% increase in the emissions estimated in the DEIR.

The FEIR states that the increased number of cruise ships with shore-side power-capability in 2012 and 2013 would increase criteria air pollutant emissions, but that when considered in combination with the reduced spectator and race support vessel estimates the change would not substantially increase the severity of a significant impact. District staff respectfully disagrees because, as noted above, the FEIR does not clearly demonstrate why the revised estimates of spectator and support vessels are more accurate than those presented in the DEIR. The increase in the number of ships running their auxiliary engines for hoteling within the SFBAAB will result in more criteria air pollutant emissions, but also result in potentially more localized impacts to sensitive receptors along the Embarcadero from emissions from cruise ships.

In addition, according to pg. 12.13-14 of the FEIR, because of the interrelationship of the AC34 and Cruise Terminal projects, the emissions associated with the temporary decommissioning of shore-side power are addressed under several impacts in the FEIR, depending on the scenario. The calculations of criteria air pollutants from the decommissioning of shore-side power were assigned to either the *construction* of the Cruise Terminal or to the *operation* of the AC34 events (to avoid double counting). Therefore, the increase in criteria pollutants associated with an increase in the actual number of shore-side power-capable ships identifies a substantial increase in the environmental impacts in Impact AQ-10, Impact AQ-4, and Impact AQ-19. While additional and augmented mitigation measures were included in the FEIR to reduce the impacts, according to the FEIR, adoption of the mitigation measures will not reduce the impacts to a level of insignificance.

Long-Term Shore-side Power at Pier 70

Mitigation measure **M-AQ-4e** states that the "project sponsor shall develop shore-side power at an offsite location that would consist of constructing 12 MW of shore-side power at the Port's Drydock #2 at Pier 70 to serve large cruise, military and other vessels while they are in drydock". Mitigation measure **M-AQ-4e** also states that should it be determined by the project sponsor that this measure is infeasible, the project sponsor shall document, to the satisfaction of the Environmental Review Officer, that the project sponsor has complied with this mitigation measure to the extent feasible and indicate why full compliance with the mitigation measure is infeasible.

The District believes the implementation of mitigation measure **M-AQ-4e**, if conducted prior to the start of AC34 in 2012, would be a positive step in off-setting the criteria air pollutant emissions associated with the shore-side decommission at Pier 27. However, the feasibility of **M-AQ-4e** should have been assessed and discussed fully in the FEIR. District staff believes that all of the information is available today to determine the feasibility of implementing this measure. As written, implementation of this mitigation measure cannot be assured and therefore may not lessen the significant environmental impacts identified in the DEIR and FEIR. However, if **M-AQ-4e** is amended in the FEIR to require implementation (and the language regarding feasibility is removed), then it can be assumed that this measure will take place and emission reductions will substantially reduce the environmental impact from de-commission of the shore-side power at Pier 27, as well as emissions from operational-related activities associated with AC34, to an acceptable level. Implementation of the off-site mitigation measure identified previously in this letter would not be needed.

District staff is available to assist City staff in addressing these comments. If you have any questions, please contact Jackie Winkel, Environmental Planner, (415) 749-4933.

Sincerely,

Jean Roggenkamp
Deputy Air Pollution Control Officer

cc: BAAQMD Director John Avalos
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